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ORIGINAL ARTICLES AND REPORTS OF CASES.

LARGE ABDOMINAL HEMATOMATOUS GROWTHS.— CHRONIC PERITONITIS—DEATH.

By A. LIAUTARD, M.D., V.S.

The ætiology of colics and their complications is a subject which presents itself in a practitioner's calls under different lights, and the true diagnosis of the nature of these disturbances is often a source of hesitancy and difficulty, which are such that often the veterinarian has nothing left to him but to resort to expectant treatment, that of symptoms. The case which is reported under the above heading is presented not only on account of the important and enormous lesions which were found at the post mortem, but also to guard the practitioner against the possibility of an error in ætiology, though in this case it proved to be one of the rarest occurrence.

That diseases of important organs as the liver or the kidneys should have been considered as the cause of the disease of the animal subject to this case, is nothing strange; but post mortem revealed the existence of lesions which, in their nature, as far as we know, have not yet been recorded.

The following history, obtained from the Assistant Veterinary Surgeon of the hospital department of the American Veterinary College, with the post mortem lesions as described by Mr. Zuill, student at the college, will prove interesting.

On the 30th of October, 1879, a black gelding about nine years of age, was admitted to the hospital of the Veterinary College for treatment, with the following history: About a year ago, he was attacked suddenly with mild colicky pains after eating his breakfast; these lasted about two hours and were treated by anodynes and purgatives. Afterwards, every few weeks he had similar attacks, lasting a shorter time, and these were kept on until about two months previous to his admission. About six weeks ago the coachman noticed the animal's belly to be a little fuller than usual, which would return to its normal condition after driving. His appetite became very delicate, and his teeth, being looked at, received proper attention, they being very sharp and irregular. The abdomen continued to increase in size, the animal lost flesh, and after much hesitation on the part of the owner, an aged lady, the poor brute having refused his food entirely, and, in consequence, being much emaciated, she decided to place him under treatment.

On admission, he presented the following conditions: his skin is tight on its body; hairs dull and staring; abdomen enormously distended in his lower part, similar to that of a mare a few days before parturition; pulse fifty-four and very weak; respiration eighteen and thoracic; temperature 104°. On percussion of the thorax, dullness is found over the posterior part of both lungs, dullness over the abdomen on both sides, extending over half of the region; the flanks are hollowed. On auscultation, diminished respiratory murmur over the posterior portion of both lungs, metallic tinkling sound on both sides of the abdomen, and plashing sound on succussion, fluctuation to the palmar surface of the hand when sudden pressure is applied to the opposite side of the abdomen; on the right hypochondriac region a large lump is imperfectly felt; feces normal, urine scanty and of a dark red color. The visible mucous membranes are pale; the mouth dry; countenance anxious and painful. Diagnosis: ascitis, due to disease of the liver. Prognosis: fatal, on account of the enormous amount of fluid in the abdomen, and of the supposed organic lesion of the liver. Treatment: cathartics, six drachms of aloes, to be followed by diuretics every four hours.

From November the first to the fourth, the anorexia was complete, the animal had great desire for liquids, the abdomen has gradually continued to increase in size, the sheath and the lower wall of the abdomen had become the seat of large swellings pitting on pressure, the pulse had increased to eighty and ninety, respiration to thirty, the temperature to $106\frac{1}{2}$, the purgative had acted freely. On the morning of the fourth, at ten minutes before eight o'clock, he was seen moving in his stall, picking at a little hay; he lay down, and by eight o'clock was found dead, death having taken place without a struggle, his bedding being in the same condition as the stableman had made it a few minutes before.

On post mortem the following lesions were found: An incision was made on the median line, extending from the pectoral back to the inguinal region, and the skin dissected on each side; the left fore leg separated from the trunk so as to expose the side of the thoracic cavity. As this was done the swelling of the subcutaneous cellular tissue of the abdomen allowed the escape of a large amount of yellowish serosity. The muscles of the pectoral region, as well as all those which had been exposed, were of a very pale color, manifest character of the anemic condition of the animal. The thoracic cavity being open, the lungs were taken out with the heart. The pulmonary organs, which had been much compressed by the displacement of the diaphragm, which extended forward as far as the fifth rib, were, generally speaking, healthy, with the exception of a very small piece of the lower border of the left lung, which showed some grey and red hepatization on a surface about six inches square. The pulmonary veins of both lungs of all sizes were filled with clots of blood of various stages, showing that embolisms of the vessels had gradually taken place by ante mortem clots.

The general appearance of the heart was healthy, the valves of both ventricles were normal, but both cavities of the ventricles and auricles, principally in the right heart, were also filled with ante mortem clots, which extended into the cavity of the large blood vessels of these cavities. The pericardium contained but a little quantity of fluid.

The opening of the abdomen was carried on with much care, to collect as nearly as possible the fluid existing there. This was successfully done, and nearly thirty-two gallons of liquid were collected. This was at first of a yellowish color, clear, but became muddy and reddish towards the end; it was more or less mixed with granular deposits of fibrinous structure. The cavity being laid entirely in view by the cutting of the abdominal walls, the most magnificent lesions were exposed.

Every part of both the parietal and visceral layers of the peritoneum was increased in thickness varying from three or four lines to half an inch. Fibrous deposits were found all over the intestinal canal, over all the abdominal organs, and the posterior face of the diaphragm was considerably thickened by their presence.

The intestines were considerably reduced in size, empty and covered with the produces of that extensive peritonitis. Their interior was empty, and the mucous membrane was pale and presented the folds of its surface as if the animal had died from starvation. Peyer's patches were healthy.

The spleen was quite healthy in structure, except towards its free extremity and over its external surface. The structure of the apex was somewhat softer than the other parts and easily torn. The peritoneal coat was considerably increased also in that part of the organ as much as half an inch.

The kidneys were, in all appearances, healthy, though somewhat pale in color.

On examination, the liver was of a natural color, of natural hardness; its capsule was easily torn and separated from the tissue underneath.

In trying to remove the small colon, in the right hypochondriac region was found floating in the abdomen, amongst the folds of the intestines, a large tumor, hanging to the small mesentery as an apple to its stem, and weighing eighteen and a half pounds, and measuring about thirty inches in circumference. This must have given rise to the suspicion of enlarged liver, as it was felt during life in the right hypochondriac region. Its shape, somewhat ovoid, was, however, irregular, its external surface bosselated

by cysts of different sizes in different stages of organization; some were soft and transparent and contained a clear serosity, while others were hard and contained fibrinous deposits varying in aspect and color, some being dark and black in appearance. On being opened, this large hematomatous growth exhibited deposits of fibrin in different stages of consistency, varying between the recently formed clot and the hardened well organized deposit. In the center was found a large cyst filled with dark recently-thrown-off and quite liquid blood. Here and there were found in the walls of some of the cysts, calcareous deposits, some of which were about half an inch square in size, others much smaller. These were principally found at the point of insertion of the pedunculum of the mesentery.

The stomach having been removed, was then examined. On looking over the part of the abdominal organs, which represent this organ, one is surprised by its enormous size and its aspect. It represents a huge mass covered with a very thick layer of peritoneum pitted as by many cicatrizes or holes. It consists of the stomach itself much shrunken and empty and of an enormous hematomatous growth, which measures fifty-six inches in its large circumference, following the long axis of the stomach, and forty-six in its smaller diameter. This is partly sub-peritoneal—only, but here and there it is spreading through the muscular coat. Towards the small curvature, there is between the peritoneal layer a large clot of recent formation: the tumor divided in its long axis, the walls of the cysts are found considerably swollen in thickness and divided into cells containing organized fibrin in different stages.

The presence of these large tumors is a fact of unusual interest, as, so far as I can find, no cases of similar nature are found on record. By what pathological process they were developed in this animal, at what might looked the beginning and the end of the intestinal canal, is a question which I regret to say the post mortem, carefully as it was made, has not allowed us to make out.

**FRACTURE OF THE FIFTH DORSAL VERTEBRA AND OF SEVERAL
RIBS FROM VIOLENT SHOCK.—DEATH.**

BY W. J. COATES, D.V.S.

As a case of rare occurrence as to the seat of pathological injuries, the following may prove of interest to the readers of the REVIEW.

A bay gelding, five years of age, belonging to a physician of New York City, was brought in an ambulance to the American Veterinary College Hospital, with the following history: About two hours previous, while driving along in a railroad track, the axle of the wagon broke near to the wheel and the side of the wagon came down with a crash. The horse became frightened, dashed off a few yards and ran into a coal cart with a terrible force, thereby throwing the doctor out of the wagon and the horse on top of him. After the doctor recovered himself, he freed the horse from his position, but could not get him to stand up, as he seemed to be paralyzed. The ambulance was then sent for and the horse brought to my notice.

On admission to the hospital the horse was laying on the right side, his breathing laborious; pulse fifty, full and strong; temperature $98\frac{1}{2}^{\circ}$ F.; he pawed much with his near fore leg. There was no sensation from the tenth rib back on being pricked with a knife. Trying to raise him in slings he would stand on his fore legs, but his hind legs would hang powerless; his neck presenting but little power of contraction, and his head slightly turned one side.

Diagnosis: Fracture of the vertebral column in the posterior part of the dorsal region.

Being informed of the condition of the animal, the owner ordered him to be destroyed.

On trying to expose the seat of fracture from the side of the bodies of the vertebræ, the abdomen was empty, the diaphragm removed, but in the whole extent of the vertebral axis thus exposed no fracture could be observed. The researches were then directed from the annular portion side, and there again

no fracture could be detected. The right fore leg was then separated from the body. On this side the first, second, third and fourth ribs were fractured into numerous pieces. Removing the left fore leg, fractures of the second and third ribs were also discovered. Then cutting off the vertebral column from the middle of the neck back to the fifteenth dorsal vertebra, the whole mass was carefully dissected and a comminutive fracture of the fifth dorsal was brought to view. The body of that bone was smashed in pieces, and some of the bone, crushed in the vertebral canal, was pressing so much over the spinal marrow as to almost cut it right across. The annular part was also fractured, and the long superior spinous process of the bone was separated and loose close to its base. The other organs were all found healthy.

RETENTION OF A DEAD FÆTUS IN A HEIFER.

By M. R. TRUMBOWER, V.S.

HISTORY.—The heifer was running with the herd last November, being about six months in calf, and was observed to show signs of heat, other cattle riding her. The owner separated her from the herd and kept her alone until the following April. In the meantime her abdomen had gradually diminished in size, without indicating any signs of parturition, the animal apparently enjoying good health. In April she was again turned out with the herd. Two weeks thereafter she was seen to strain forcibly and to be uneasy, getting up and down, thick pus meanwhile flowing from her vagina. She was again separated from the herd, but still continued the straining, gradually losing flesh. No offensive smell from the discharge was at any time perceptible nor any apparent pain except at the time of straining, which would only occur immediately after rising to her feet from lying down.

On May 29th I was called to see her. She had for the past two weeks failed in appetite, and on that day the desire to eat or drink was altogether absent; persisted in lying down; reduced to a mere skeleton, almost incapable of getting up without as-

sistance; pulse 80, weak and intermitting; eyes sunken; gums shrunken away from the teeth; breath fetid. Further examination revealed a dead foetus, the head lodged in the vagina, nose three inches from the vulva, which was not dilated, rendering the first introduction of my hand difficult. The uterus was dilated and apparently healthy. The top of the head of the foetus was worn bare to the bone, from chafing against the sacrum; the dorsal vertebræ were loosened from their muscular and ligamentous attachments, and the superior spinous processes bared by friction; hair fast; no evidence of decay anywhere; the muscular tissue—worn to shreds along the back—retained all the strength and compactness of the living foetus; a large quantity of thick pus, of the consistence and color of thick cream, surrounded the foetus. I delivered the calf (after removing the bones of the skull in pieces) with little difficulty. The foetus was well matured. I then removed about two gallons of the pus described. Prescribed ferruginous and bitter tonics, also carbonate of ammonia to be given every six hours. The appetite was regained in a few days, and the animal made a rapid recovery.

The interest of the case centers in the absence of putridity, the change of the membranes into pus, and the complete preservation of the dead foetus.

THE MISUSE OF SLINGS.

BY PROF. A. A. HOLCOMBE, D.V.S.

On the 28th of October I was called to see a fine bay carriage horse, suffering with acute pneumonia of the right lung. Ten days before he had become cast during the night, and was found in the morning completely exhausted from his continued struggles, and entangled in the rope by which he had been tied. With considerable difficulty and assistance he was raised and placed in slings, where he was left until the time of my visit.

The history of his sickness was as follows: Upon the side which had been in contact with the floor were several abrasions which were quite sore at first, but rapidly improved; on fore-leg, the

inner surface of the off-thigh and beneath the fetlock were abrasions that had cut deeply into the skin, but were healing kindly when I saw them. No other injuries were detected. During the first five days his appetite was good; he drank well and had regular movements of the bowels, but the urine—which was excreted in apparently normal quantities—was darkly colored as though with blood. This condition of the urine lasted for a few days and then cleared up.

From a critical examination of the patient I could not determine that he had suffered from any other injuries than those named above, if we except the probable injury to the loins as a cause for the dark colored urine. An external and rectal examination of the lumbar region revealed no lesions nor symptoms of injury at the time I was called.

On the fifth or sixth day the patient began to get worse, the breathing becoming rapid, thirst increasing, the appetite failing, and the animal growing very uneasy in the slings. It was evidently about this time that pneumonia set in. When I visited him I found him standing in slings which nearly raised him from his feet, making efforts every few minutes to relieve the constriction of his chest by advancing the hind feet well forward as seen in taminitis, and then by force of muscular contraction supporting the chest for a few moments free from the tightly-drawn slings.

The heart was beating so rapidly and faintly that it was impossible to count its strokes; the respirations were above thirty to the minute, the temperature at 108 degrees Fahrenheit, and the body bedewed with cold sweat. The extremities were quite cold, the mucous membrane blue, and the breath fetid. In fact, the animal was dying from gangrene of the lungs, probably induced from the misuse of the slings which had been employed undoubtedly with the best intentions.

That more misery could be produced from a mistaken kindness than was seen in this case can scarcely be conceived, while the economy that suggested the calling of a veterinarian only when the animal had reached the period of dissolution, is one that, in this case at least, resulted in disaster.

EDITORIAL.

A SANITARY VETERINARY BUREAU.

Our article on the organization of a Sanitary Veterinary Bureau has seemed to meet from one of our friend contemporaries, the *Medical Record*, not as kind a reception as past relations had encouraged us to look for; and the notice which it gave to it in its issue of November 8th, ult., receives an answer from one amongst us, which we publish to-day. At first we felt much disappointed in reading the article; but on second consideration we looked upon it as a good move on the part of our friend co-editor, and we are now somewhat inclined to thank him for the trouble he has taken in bringing the subject before the medical profession, to which we have accustomed ourselves to look for support, assistance and recognition.

Few physicians, we are sure, will consider the subject in the same manner as the *Medical Record*, and we have every reason to believe that its sarcastic remarks will not be accepted by the large majority amongst the members of the medical profession.

The question, whether or no there are enough veterinarians of education in America to organize a Sanitary Veterinary Board of Health, is one which, we believe, we are better able to judge of than the physician—and in supposing that we are but a few, we are to learn yet that a large number is essentially necessary for the work to be done. We know of some States where contagious epizootic diseases have been got rid of by *one single veterinary surgeon*, and those States have remained free from such diseases to this day.

As to the condition of the standing of veterinarians, the subdivision made by the *Record* is also essentially erroneous. What does he mean in saying that "we have in America but one veterinary college which exists under legislative sanction and which can grant genuine diplomas." So far as we know, there are three schools *legally* incorporated and *legally* authorized to grant diplomas. Whether these diplomas are obtained, as regular medical practitioners generally understand, is not the question; these degrees are nevertheless genuine.

The article we have referred to, we are inclined to believe, was written in connection with the action of the United States Veterinary Medical Association at its last meeting, by which a committee was appointed to draw a set of resolutions to be presented to Congress, urging the necessity for measures to be taken in relation to contagious diseases of domestic animals.

According to the appointment of said committee and the power granted to it, the following gentlemen met in New York on the 11th of November, viz.: Prof. A. Liautard, M.D., of New York; Prof. A. A. Holcombe, of New York; C. B. Michener, of Pennsylvania; E. F. Thayer, of Massachusetts—members of the committee, and, by special invitation, Prof. James Law, of Ithica, N. Y.; A. Lockhart, of New York; C. P. Lyman, of Massachusetts, and Prof. J. L. Robertson, M.D., of New York. Dr. N. H. Parren, of Chicago; W. T. Corlies, of New Jersey. F. S. Billings, of Massachusetts, and J. B. Myers, of Cincinnati, were unable to attend, but some of them at least notified their willingness to endorse any action the committee should see fit to recommend.

The object of the meeting and how the Sanitary Veterinary Bureau should be constituted, were first discussed. After many remarks from the different members present, it was decided that it would be better to suggest an independent organization, rather than to have it connected with the Agricultural Department at Washington, or with the National Board of Health, and after the appointment of a sub-committee for the drawing of the resolutions, the following were unanimously accepted at a subsequent meeting held on the 25th of November:

CONTAGIOUS DISEASES OF DOMESTIC ANIMALS.

PETITION,

Presented by the United States Veterinary Medical Association.

To the Honorable, the Congress of the United States:

Whereas, It has been shown that different animal plagues prevail to a disastrous extent among the live stock of the United

States, and that many millions of dollars are annually lost to the nation from this cause.

Whereas, Several of the most redoubtable of these plagues are now restricted to circumscribed localities, but threaten speedily to extend over wide areas, where, from the mingling of herds on unfenced ranges, like the plains, they must become permanently domiciled, at an immense yearly loss that will steadily increase with the constant advance of agriculture, and the increase of our live-stock.

Whereas, The unfenced stock ranges of the South and West are at the source of the traffic in live stock, and their infection must determine the infection of all the channels of the traffic (cars, boats, yards, &c., &c.), and of the Middle and Eastern States.

Whereas, Several of these animal plagues have already led different American and European countries to place embargos on our live stock, which will be maintained so long as these pestilences are allowed to exist in our midst.

Whereas, The extinction of these animal contagia is of incomparably more importance to the Western stock raising States than to the Eastern, even though they may be at present exclusively confined to the latter.

Whereas, It is not probable that all the infected States will of themselves go to the trouble and expense of stamping out these pests, in which they have so much less pecuniary interest than other States, which are as yet unaffected.

Whereas, Certain of the most destructive of these pestilences are exotics to the stock exporting States, and can be effectually and permanently eradicated from them.

Whereas, A large number of animal diseases are due to contagia or to parasites that are communicable to man with equally disastrous results.

Whereas, There is constant danger of reimportation of the same and of other exotic animal plagues, unless a proper inspection and quarantine of imports shall be inaugurated ; and,

Whereas, The restriction and extinction of these diseases can be best accomplished under the direction of the veterinary profession, who alone have made a special study of these epizootics,

and are acquainted with the laws of their propagation and development.

Resolved, That we, the undersigned, members of a committee of the United States Veterinary Medical Association, appointed for that purpose, do hereby respectfully petition that the Honorable the Congress of the United States shall establish a Veterinary Sanitary Bureau, whose duty it shall be to advise Congress as to what measures shall be necessary to control, restrict, or eradicate any contagious or infectious disease affecting the domesticated animals; and,

Resolved, That in view of the urgent necessity for the eradication of the *Lung Plague* of cattle from the United States, the restriction of "Texas Fever" of cattle to those Southern States in which it is already domiciled, and the protection of our flocks and herds against pestilences that may be imported with foreign stock, Congress is further respectfully requested to appropriate a sufficient sum of money to enable the Veterinary Sanitary organization to deal at once and effectually with these important matters.

It may not become us to say whether this petition will be of any avail, or if any notice will be taken of it by our honorable members of Congress, but at any rate it will show to the country at large and to our friends of the *Record* that there is unity amongst the members of the veterinary profession; and that, if the names attached to the petition are of any value, there is amongst the veterinarians of America sufficient power to organize a Veterinary Sanitary Bureau competent to deal with the contagious diseases of our domestic animals, from which the immense revenue and wealth of the country have to sustain such enormous yearly losses.

This petition will be printed and distributed all over the country, and we feel no hesitancy in saying that, coming from all the States of the Union, it will not fail to be recognized as the expression on the part of a large number of our countrymen of an important need, which we can no longer afford to overlook, notwithstanding the pretended difficulties which are said to be in the way.

PREPUCLAL CALCULI.

One of our correspondents, Mr. Trumbower, sends us a specimen of a very large prepucial calculus, and gives in his letter, which will be found in the pages of this number of the REVIEW, the history of the case.

These concretions, which are found in the sheath of the horse and pig, exist also in the ox and sheep, and are concreted around the hairs surmounting the prepuce. They consist of masses of phosphate ammoniaco-magnesian, oxalate, and carbonate of lime, mixed with organic matter of a very offensive and peculiar odor.

The specimen, which we have received, is the largest which was ever brought to our consideration, and in connection with the prevailing existence of those concretions and the nature of the water drunk by the animals thus affected, we would suggest the propriety of a minute examination of the condition of the urinary apparatus, looking for urinary calculi in the bladder, or the urethra, as there might be found the starting cause of these accumulations.

TRANSLATIONS FROM FOREIGN PAPERS.

GOURME; OR, HORSE VARIOLA.

NATURAL AND IRREGULAR FORMS OF THIS DISEASE—INOCULATION AS A PROPHYLACTIC MEANS OF ITS COMPLICATIONS.

By M. L. TRASBOT.*

(Continued from page 336.)

III.

The only certain and undeniable cause of the appearance of gourme, the one whose efficacy is materially proven by good, positive facts of clinical observation and direct experimentation,

*Translated by A. Liautard, M.D., V.S.

is contagion. There is certainly no veterinarian who has not had several occasions to observe these facts. On this point, truth is definitively granted to science.

Therefore, it is a fact which must have seemed incomprehensible to all attentive observers, that such educated men and able practitioners as H. D'Arboval, Vatel, Rodet and Delafond have ignored the contagious property of gourme, specially when all those who came before them—Gilbert, Sacco, Gohier and Toggia—had so well established the fact by considerably numerous observations, and even by experiments of incontestable results.

This error, however, was easy to explain. Two causes have contributed to give rise to it and to propagate it for a certain time: the first was the influence upon almost all minds of the absolute doctrine of Broussais; the second, the belief that all inflammatory diseases of the anterior respiratory passages in the young horse was gourme.

One considered as pathological entities a great number of specific diseases, virulent or infectious; and the other, in allowing to consider as not contagious by cohabitation certain angina, always believed to be gourme, seemed to furnish facts for the support of the theory. No more hesitation then to generalize and formulate a law opposed the one that no one before had thought to doubt. It was overlooked that things entirely different were mixed up, a simple inflammation and a specific disease. The numerous examples of propagation were no more considered. It was so easy to connect their development with the influence of all worthless causes, that there was no difficulty to explain them. Still we must acknowledge that this idea of the non-transmission was never universally adopted. Notwithstanding the authority of the names above mentioned, many practitioners, the majority even, continued to consider the disease as contagious. Seeing it daily communicating itself in such evident manner, they soon left aside all other assertions *à priori* to believe on the clinical proof of facts. And thus there remained no one to convince.

However, as this idea of the non-virulency was strongly argued, it has seemed to me proper to mention it, at least to show to what extreme judicious minds may allow themselves to be

blinded under the power of a systematic law, accepted without discussion, because it is formulated by a man of immense talent and great power of persuasion. This error, born from the doctrine of Broussais, was not the only one it gave rise to. How many more enormous by their consequences, can be traced to it.

Specially in therapeutics. What excess was not reached when almost all diseases were treated by abundant and repeated blood-lettings?

In the future and even from to day, it may be said that similar systems would have no chance of long successful life. No matter how great the talent which might present and defend them, they would soon fall to pieces in presence of the control of experimentation.

The definitive application of the experimental method to the study of biological science, must in future render these mistakes, if not impossible, at least only momentaneous. By it, all these doctrines, based only upon more or less ingenious speculations, which often conceal their insanity under the greatness and elegance of their form, will soon be wiped away.

Simple, precise and well-circumstanced data, is what a sure method teaches us to exact first of all as scientific materials. It shows, besides, that a single, positive fact, obtained by an experiment carried on according to a severe determinism, has an absolute signification that no theory can infirm. All those, whose laws are contradicted by a single experimental result, are false or incomplete, and must be thrown aside. Consequently, from the day, when it was well observed, that gourme had been communicated to a healthy horse by either placing it alongside a sick one, or, better, by inoculating him, one can affirm positively that this disease is contagious. The proof of the correctness of this affirmation is complete and irrefragable, and no one to-day would think to express a doubt on this point. It would then be superfluous to insist to firmly establish a truth which no one would contest.

The only question which really remains to resume here is that of the various mechanisms by which the contamination may be effected. In truth, all are known, but not collected in a single

and complete group. Indeed, the majority of authors have studied on one side the contagion of gourme, considering only, without thinking, its deviation, and on the other that of the horse-pox, equine virus, etc., that they regarded as a peculiar affection. Except M. Henry Bouley, who recognized the eruption first (*herpes phlyctenoides*) as a kind of epiphenomena of gourme, and who, though he did not write it, in 1863, do not hesitate to look to horse-pox as the characteristic sign of the disease, no one yet that I know, has seen the intimate union existing between the two: and no one specially to this day, has expressed in a firm manner the idea that the horse-pox or variola of horses is the natural and regular form of the disease. One could not then gather in a single paragraph what remained separated in the mind. To-day it is not so. The time has come to collect together these various forms of the same thing: *gourme* of old and modern writers, *grease* or *sore heels* of Jenner, *pemphygoid rhinitis* of David, *horse-pox*, variolous diseases of the horse described by Petatard, *lymphangitis*, called flying farcy; for all this is gourme.

The study of the transmissibility of this disease must then comprehend all these phases of the question and collect together the documents spread here and there. And, considered in this synthetical manner, taken under this light, which with perfect conviction I consider as the truth, it becomes easy and can be briefly presented.

The easiest mechanism of communication of the disease to understand is incontestably the direct inoculation. In taking the serosity exsuding from the surface of pustule deprived of its epidermis, and introducing it under peculiar conditions into the organism of a horse, until then free from the disease, one will surely transmit it. Repeated indefinitely and executed in similar conditions, the experiment will always give the same result. This introduction may be realized by numerous ways.

One of the most eminent masters of veterinary medicine, Professor Chauveau (of Lyons) in different series of experiments instituted to study the transmission, regeneration and pathological anatomy of vaccine, has applied about all that can be imagined.

From his remarkable labors some were communicated to the Academy of Medicine in 1865, 1866 and 1868, others in the Annales of Dermatology in 1871, and in the Journal of the School of Lyons in 1877. This last, Contribution to the Study of the Original Vaccine, Comparative Remarks upon the Vaccinogenous Aptitude in the Principal Vacciniferous Species,* is, properly speaking, the relation of all the forms of inoculation tried by the author; and is the resumé of the results he has obtained with each mode, not only in the horse but upon the ox. They are all so well known that to mention them is to remind all of the results obtained. As, however, many of the facts carried with them a real instruction, it may not be useless to cite them briefly.

In a first paragraph, after some consideration upon the natural form of the eruption and its ordinary site, M. Chauveau gives the negative results obtained by transfusion of the blood. This liquid, taken from affected animals in the *period d'etat*, and injected in the veins of two healthy animals, did not contaminate them. A month later sub-epidermic inoculation on these animals proved successful. This is undoubtedly one of the most demonstrative experiments. For, though negative facts have not an absolute value, when two cases like those are reproduced alike in different experiments, they furnish the elements of a scientific certitude as completely as possible. It must then be admitted that at the *period d'etat* of the disease the blood is not virulent. Perhaps it would not be so, if one would experiment with the blood at the *period of eruption*, at the time when this will begin!

To this day, no one to my knowledge has yet realized this experiment, and it is doubtful if it will ever be, on account of the difficulties it presents. There is consequently one point to reserve on this question.

Still it is true that the transfusion of the blood would always be an unsatisfactory and bad means to communicate the disease to a healthy subject. M. Chauveau has proved, however, that in virulent affections, others than those which are septic, of

*Contribution à l'Etude de la Vaccine Originelle, Recherches Comparatives sur l'Aptitude Vaccinogene dans la Principales Especes Vacciniferes.

course, the blood was poor in virulent matter. It was known long ago that, to succeed in inoculating sheep with small-pox, or even vaccinate children, the serosity must be clear and not mixed with blood. This last liquid was never to be used exclusively.

The experiments of M. Chauveau have then well confirmed the facts obtained by clinical observations.

A second paragraph of his memoir relates the numerous experiments of sub-epidermic inoculation, always followed by success upon animals subject to the disease. The mode is, consequently, not only the simplest but the surest. At this point, M. Chauveau observes that sometimes and frequently upon very young subjects, the local is accompanied by a generalized eruption, and as proofs of the correctness of this opinion he cites two well demonstrated cases.

Though hesitating to differ in opinion with such an expert and distinguished experimenter, I must say that I have always seen the eruption generalized on animals affected for the first time. It is more or less abundant and easily seen, but never missing. As well as in inoculating the small-pox to sheep, the distemper to pups, and even variola to man, one communicates to the inoculated individual a general affection, as well by the inoculation of its variola proper or horse-pox, one gives to the horse a disease whose eruption is not limited to the points of inoculation.

I will return to this question later. For the present it is well admitted that inoculation performed upon a healthy animal gives him surely the disease. Incontestable and uncontested fact.

As to the effect of inoculation upon animals previously affected, it is generally negative. In the cases where it is positive, it is only when the first attack took place for some time past, and yet the development of the pustules is limited to the points where the virus has been applied. I have often tried to inoculate a second time a horse which had already been so treated several months previous. It would, however, be an error to believe that this recidive cannot take place. M. Chauveau cites several examples. All veterinarians have seen it, and for myself I have succeeded in obtaining handsome pustules on a five years old horse, which I inoculated also successfully when one year old.

Recidives may then be observed, and that is not in contradiction with the general data found in similar eruptive diseases. The variola proper to man, to which Jenner has so happily substituted that of cow, under the shape of vaccine, has quite often manifested itself twice on the same individual. This variola of second manifestation, named varioloid on account of the relative benignity, was nevertheless true variola. It was contagious like the other and capable of assuming all its seriousness when communicated to a subject as yet free from its effects.

It is then not surprising if *gourme* may recidivate, when an animal affected in a far back period is placed in an infected center or inoculated a second time. This, I repeat, is not in contradiction with what is known since a long time. But from that, to admit that it may reproduce itself four or five times in the same animal with the change of the seasons, etc., there is no consistency of relation whatever.

Because anginae, for instance, have been observed for five or six years successively at the same epoch and under the same causes, acting on the same individual, is it to follow that these were always *true gourme*? Evidently, in these peculiar cases, a simple inflammatory disease was taken for this specific affection. We know that all accidental inflammation developed in any tissue predisposes it to a return of the same nutritive trouble. It is then very natural that some animals affected with angina at a given time, be affected alike much easier than others under the influence of an exposure to cold; but this is not *gourme*.

Therefore from what has been said above, it is proved that

1. The serosity of the pustules of the horse-pox or *gourme* inoculated to a horse, which never had the disease, gives rise in him to a generalized eruption. This was produced upon six subjects which I had watched since birth and whose antecedents I knew.
2. The same inoculation performed on an animal cured of the disease only a short time since, remains without result.
3. Upon an animal, which has had the disease for a long time past, the inoculation gives sometimes a positive result, but never as complete as in the first attack. Then most generally the pustules are developed exclusively upon the points where the virulent liquid

has been deposited. When the eruption is generalized it is light, and the pustules are remarkably smaller. Such are the results obtained by M. Chauveau and from the far less numerous but not less satisfactory experiments I have made.

To these I would add a fourth conclusion. The repeated apparition of an angina does not implicate at all that there is a recidive of gourme.

I have already said that M. Chauveau has employed several other modes of experiments, whose results I must indicate briefly, as they have considerable importance to elucidate the problem now before us. In his attempts of vaccinal infection by the respiratory passages he has failed. "In making horses whose trachea was open by a small trocar, inspire dust of dry vaccine," he sometimes obtained pustules on the lips and on the nose. "But," he says, "the positive results were rare, though the experiments were numerous."

In giving in beverages a notable quantity of vaccinal matter, he has obtained in two *young horses* the two finest generalized eruptions he ever saw, and besides these two has had numerous failures.

In connection with this series of experiments of inoculation by the digestive apparatus, I may be allowed to ask the eminent profession a question which, I desire to state, has no critical object in view. Is it sure that, in the special cases a direct inoculation, in consequence of the contact of the liquid with the lips and the mucous of the nose, has not followed? When arrived in the stomach, is not the virus destroyed by the gastric juice whose function is precisely to dissolve animal substances? In other words, is it by internal absorption that the virus penetrates the organism? To refute this objection it would be necessary to obtain a positive result in injecting in the oesophagus the virulent liquid, thus avoiding its contact with the lips and the pituitary membrane. Has some one followed this mode? I have injected for several days a bull and a cow with the liquid of pleuro-pneumonia, but have not produced the disease. This I know is not sufficient to infirm the law of transmission of a virulent disease by intestinal absorption.

Still, as long as positive facts are wanted, this law will not be

immaculate. In admitting that tuberculosis, for instance, is transmissible by this way, one is not justified to conclude in the result for all other affections, specially for the horse-pox. It seems to me then, that the certainty of vaccinal injection, through the digestive organs, is not yet surely established; that other new experiments are necessary to place it on undoubtful ground.

By the injection of vaccine in the subcutaneous connective tissue, M. Chauveau has seen in all subjects, without exception, at the point where it was done, an inflammatory tumor resolving itself soon, and upon *a few* a generalized eruption of vaccinal pustules.

Injected in the lymphatic vessels of eleven old horses, the vaccine has given a generalized eruption in four. Similar injections in the veins in twenty-seven animals were followed by positive results in eleven cases. The young subjects gave the most success.

All those experiments, whatever the number of positive results may be, as one alone in each series would be a certain proof, establish with certitude that the disease may be communicated by injection of the virus under the skin in the lymphatics or in the veins. This is incontestable.

What were the causes of the quite numerous failures observed? M. Chauveau looked into them.

Thinking first that the vaccine which he used might be of bad quality, he convinced himself that it was not by inoculating with success and comparatively other animals. Then he thought the animals were not subject to the receptivity of the virus. He soon had to throw this idea aside, as he observed that, in the subjects submitted to the sub-cutaneous intralymphatic arterial or venous infection, the re-vaccination with vaccine whose quality was known, failed also as well on those who had presented no symptoms as on those which had shown eruption after the injection.

He concluded that all had received the same impression from the first introduction of the vaccine, that there had not been any negative results, that the infection of the economy had taken place in the same manner on each animal. According to his idea,

there was variable only the exanthematous appearance, sometimes none, sometimes reduced to a single pustule, now localized on the naso-labial region, and again disseminated all over the body.

This manner of considering, however, I do not believe sufficiently true to be accepted. I say so without hesitancy, as I am convinced M. Chauveau will appreciate this as merely the desire to arrive at the truth.

The re-vaccination he has performed, proved incontestably that the subjects which received the injection of vaccinale serosity, were all destituted of receptivity for the disease, but not that those in which the injection had produced no apparent effect, possessed really this receptivity at the first experiment. For, as he remarked himself, it is difficult to admit that the introduction of a virulent liquid in an organism, being a favorable ground for the evolution of the disease, may impressinate it in some peculiar manner without showing it by appreciable sign. And still he thinks that the injection of vaccine, which had produced no eruption on a certain number of animals, has destroyed in them the aptitude to contract the disease. I repeat, it is not proved that they possessed this aptitude at the first experiment; but what makes M. Chauveau believe it is, that on all the animals which were not submitted first to the experiment and which he vaccinated comparatively by sub-epidermic insertion of the same virus, he has seen handsome pustules of vaccine; but this is not yet a sufficient proof. He may have been unfortunate in his experiments; he may have had, in the series of animals vaccinated directly with the lancets only, subjects which to that time had remained rebels to the effects of the disease, or had been affected a long time back, likely then to take it again: and, on the contrary, find in the other series where the experiments of injection, inspiration and sub-cutaneous or vascular injection were followed, a number of individuals already protected by an anterior attack (not of long previous epoch) of the disease. M. Chauveau does not pretend that one inoculation of horse-pox must necessarily be followed with success. If he re vaccinated shortly after, the effect is none. I will add that it is the same, if he vaccinated when just cured of gourme. Not only the immunity resulting from a

first vaccination or of the disease contracted by cohabitation protects the animal for a certain time, but even sometimes and possibly often (point yet to be lightened) in a permanent manner.
(*To be continued.*)

SOCIETY MEETINGS.

MEDICAL ASSOCIATION OF THE AMERICAN VETERINARY COLLEGE.

The first meeting of this Association, session 1879-'80, was called for Wednesday evening, October 8th, 1879. The President and Vice-President being absent, the meeting was called to order by the Secretary, Dr. R. A. McLain, who presided during the exercises. The officers elected for the ensuing year were: President, Prof. A. A. Holcombe; Vice-President, Mr. Geo. H. Bailey; Secretary, Mr. T. C. Cowhey; Treasurer, Mr. M. Bunker.

It was determined to hold regular meetings of the Association once a week, at which some member of the senior class should present and defend a paper on the subject allotted him by the Faculty of the College at the close of the last session. The first regular meeting was held on Friday evening, October 10th, at which time a paper was presented by E. R. Wing on "Distemper in Dogs." At the second meeting T. C. Cowley read on "Hog Cholera." At the succeeding meetings the following papers were presented in the order named: W. H. Hornblower on "Differential Diagnosis of Colic," H. B. Boyd on "Spavin," W. T. Zuill on "Tetanus," D. W. Cochran on "Shoeing the Healthy Foot," H. F. Foote on "Veterinary *versus* Human Medicine."

TETANUS.

[*Extracted from a paper read before the Medical Association of the American Veterinary College by M. Zuill, of Bermuda, W. I.*]

Tetanus in the Island of Bermuda is without doubt the prevailing disease amongst both man and beast, and it not unfrequently takes on an epizootic or enzoötic form, as was the case

in 1874, when wounds of every part of the body, of every kind, degree, and extent, from a slight cut or saddle-gall to the most serious surgical operation, was followed by this disease. Even the physiological process of shedding the milk teeth, as well the simple bruising from the whip-lash, have been attended with this important sequel. During the season above referred to many people died from this disease induced by such trivial causes as the extraction of a tooth, cupping, or the paring of a corn, and D. Outerbridge related a case to me in which a negro was so frightened from lacerating his thumb with a broken china dish, that he was immediately seized with convulsions and died from tetanic spasms in fifteen minutes time. Our climate there seems to exercise considerable influence in the production of this disease, and that it should do so, may be understood when it is known that during a period of twenty-four hours, we frequently have several of the most marked changes of temperature and weather. In some instances exposure to cold and dampness is followed in a few hours time by acute tetanic symptoms, and lambs have been seen so rigid from the spasms that their bodies could be raised and held horizontally by simply grasping them by the feet.

Regarding the treatment of this disease in Bermuda, Dr. Theodore Outerbridge, resident Veterinary Surgeon, has been most successful in using belladonna in full doses. Purgatives are required in very large doses, while belladonna applied in plasters over the entire length of the vertebral column is believed to be attended with favorable results.

Among the negro children of the West Indies one form of this disease is known as the "nine-day-sickness" or "jaw-fall," from the fact that usually on the ninth day the muscles heretofore affected with trismus relax and allow the lower jaw to drop upon the chest. In Jamaica about fifty per cent. of the negro children die from this disease.

ONTARIO VETERINARY COLLEGE MEDICAL SOCIETY.

The first weekly meeting for the season of 1879-'80, of the above Society, was held in the lecture-room of the College on

Friday evening, Nov. 7th, Prof. Smith, President of the College, occupying the chair. Fifty-nine new members were enrolled. After introductory remarks by the chairman, pointing out the benefits to be derived from these meetings, the election of officers for the ensuing session was held, resulting as follows: Mr. J. P. Whitehead, Delaware, Ont., Secretary; Mr. B. B. Page, Chicago, Ill., Treasurer; Mr. R. Riddell, Cobourg, Ont., Librarian; Mr. G. Dunphy, Assistant Librarian. Mr. Whitehead communicated a case of contused wound, which gave rise to an instructive debate, which was followed by the chairman's address; after which the meeting adjourned.

MONTREAL VETERINARY MEDICAL ASSOCIATION.

The fortnightly meeting of the Montreal Veterinary Medical Association was held in the lecture room of the College, on Thursday evening last, November 20th, Professor McEachran in the chair.

After business of Association was finished, the Chairman called upon Mr. Peter Cummings to read his communication on Superficial Necrosis of the Os Pedis.

Mr. Cummings described the case in full detail. The reading of the same was listened to with great interest by those present.

Mr. Charles Ormond, of Milwaukee, read a very interesting paper on Bone-Spavin, in which he evinced a more than common knowledge of the nature of this disease, the causes on which it depends and the changes that take place in the joint. In his treatment he described a method much practised by his father, Mr. W. M. Ormond, of Milwaukee, by which he claimed to be more than ordinarily successful in restoring the animal to usefulness, viz., cauterization of the joint by a pointed hot iron, inserted between the bones, by which anchylosis was produced.

A most animated discussion followed, in which the whole question was fully and intelligently discussed, the majority favoring as more rational the plan taught by the President, of fireing and blistering completely around the joint.

The notorious prevalence of spavin in horses in Canada,

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especially in the poorer parishes, where proper attention is not paid to the selection of breeding stock, was fully commented upon. Where spavined horses or mares are used for breeding, this disease is very common, and the losses entailed by rearing worthless animals were incalculable. Too much cannot be said to urge farmers to stop breeding from unsound animals.

The meeting was one of unusual interest.

The next papers, to be read on December 3d, are on Tuberculosis in Cattle, by Mr. William McEachran, and one on Veterinary Dentistry by Mr. J. B. Green, Ohio.

CORRESPONDENCE.

Editor Veterinary Review:—

In the *Medical Record*, bearing date of Nov. 7th, 1879, appeared the following observations regarding the establishment of a National Veterinary Sanitary Bureau:

"At the general meeting of the American Veterinary Association, held recently in this city, a proposition to establish a National Bureau of Veterinary inspection was made. It was proposed that the bureau have similar powers, as regards animals, with those possessed by the National Board of Health. The disease which, it is thought, more especially calls for such an organization is pleuro-pneumonia. It is urged that recent events have shown how valuable it would be to large commercial interests to have a central bureau that might keep cattle dealers and shippers constantly informed as to the prevalence of contagious diseases. Such an arrangement would prevent panics and render impossible the prohibition of American cattle by European governments upon mere sensational reports.

"It is, on the other hand, said that such information can be secured without government aid. Furthermore, the present status of Veterinary Medicine is so undefined that a National Bureau would not have much more of legitimate professional basis than a National Bureau of Barbers to keep themselves informed upon sycois. There is in this country only one Veterinary College which exists under legislative sanction, and which can grant genuine diplomas. Veterinary practitioners, therefore, are composed of three classes: persons who have graduated from a regular and one regular home school; persons who have graduated from other home schools and have been granted diplomas which are not legally recognized; and third, persons who have no regular education whatever.

"It is feared that the establishment of a National Bureau out of these elements would produce endless quarrelling, without receiving any valuable results."

When unusual power is developed in the hands of one man from a concatenation of circumstances that are but in part dependent upon that individual's efforts, it becomes a weapon dangerous in an inverse ratio to the sense of justice with which he employs it. This control of power is usually sometimes imperceptibly attained by the editor of a widely circulated paper, and the influence exercised by his expression of opinion is disproportionate to its real value. A wilful or unguarded misstatement may under these circumstances result in irreparable injury, simply from an inability upon the part of the sufferer to reach with successful contradiction, all the channels that have been contaminated by statements coming from an assumed respectable and trustworthy source. When such injustice is done through want of forethought, the greatest reparation that can be rendered is entirely within the control of the editor, while that which is irreparable can be forgiven by the injured when he learns there was an absence of motive; but when the editor of a scientific journal designedly stoops to malign a sister science, simply because her votaries are, as yet, numerically weak, it exhibits a development of unwarrantable bigotry that is a disgrace to an enlightened country in this period of the nineteenth century.

That the *Medical Record* possesses the power to render strong, if not successful opposition to any measure that may relate to things medical, cannot be denied; and that its remarks, quoted above, were intended to cast opprobrium on the veterinary profession, seems equally as apparent.

What the necessity for such injustice may be, does not seem apparent, nor is there, so far as outsiders can comprehend, any worthy object to be attained. The veterinary profession *can*, *must* and *will* eventually reach its rightful position, inferior to no other, and it now meets with an opposition sufficiently difficult to be overcome, in the prejudice which affects the minds of the general public from their lack of knowledge of its importance, without having this supplemented by unjust stricture from mem-

bers of the medical profession, who, of all others, should be best able to understand the truth of our claims and the first to concede us our dues.

Comparisons are usually the most odious when founded in unpalatable facts, and it was probably owing to his memory of professional forefathers who, as Greek slaves, were keepers of the Roman bath and barbers, that he made reference to their vocation and deficient knowledge of dermatology.

Whether or not he entertains any reverence for these progenitors of his, or whether they were properly acquainted with the nature and general prevalence of "sycosis" amongst the citizens of Rome, does not appear, but it cannot be denied that their knowledge of surgery excelled that of their self-assumed superiors, who scorned with contemptuous indifference the claims which these votaries of a struggling science had upon the practitioners of medicine and the State.

Had it not been for this intolerant bigotry which supported centuries of persecution and oppression, the history of human surgery might have been more glorious than it is. That veterinary surgery should meet with a kindred experience at this time and in this country, so noted for its rapid progress, is almost beyond the understanding of one who is acquainted with the history of the past.

The statement that "the present status of veterinary medicine is so undefined" affords no just grounds upon which the claims of the profession to render important service can be derided, nor is it a sufficient pretext for opposition to our endeavors to gain just recognition at the hands of Government.

The virtue of the medical profession is not entirely above reproach, if we may judge from the opinions expressed by the majority of her practitioners, and the elements of her composition are not so commendable as might be inferred from the *Record's* strictures upon the veterinary profession. We need not go beyond the confines of New York city to find practices perpetrated under the wing of the medical profession that would put to the blush the barbers of any age. The profession, as a whole, is composed, not of three, but of five classes: First are the regular

graduates in allopathy from respectable schools; second, the followers of Hahnemann, who are looked upon by the allopaths as a lot of fanatics; third, practitioners who have received their diplomas from schools that are a disgrace to a civilized nation; fourth, practitioners who, after a prescribed number of years of practice (?) are licensed by a State or County Medical Society; fifth, those who have no education or professional recognition and are empirics in every sense of the term.

Is this a respectability that permits of any boasting or warrants the throwing of stones? Does the veterinary profession contain any elements that can compare with the moral degradation of thousands of human practitioners? It would not be claiming much to assert that, taken as a whole, the veterinary profession presents the better showing. We do not claim any sympathy for the irregularity of composition of our profession, nor do we intend to say aught against the respectable and representative portion of the medical profession, for they undoubtedly regret their present unfortunate position and desire something better, yet we would suggest that an effort be made to remove the beam from their own eye ere they seek to deride the presence of the mote in the eye of their weaker neighbor.

The regular members of the veterinary profession are fully conscious of the obstacles presented by the presence of empirics within their ranks, and they know, what the *Record* does not seem as yet to have learned, that kindly recognition of true worth and the rendering of impartial justice, by respectable members of all the sciences, will soonest and most effectually remedy the evil.

That a National Veterinary Sanitary Bureau could not be established from the ranks of the regularly qualified alone, as is assumed by the *Record*, seems to be an unconsidered and illogical conclusion when we remember that a National Board of Health has recently been formed from a profession of as equally bad or worse composition. It is no more to be assumed that all elements are to be represented in the one instance than in the other. That our present National Board of Health meets with any serious opposition from the irregular members of the profession, or that its labors

are rendered inefficient from "endless quarreling," does not appear from the facts within the public reach.

The thought that "the disease which more especially calls for such an organization is pleuro-pneumonia," must have originated in a mind ignorant of the facts in the case, for it is no more the desire of the veterinary profession to have a National Veterinary Sanitary Bureau established to deal with pleuro-pneumonia alone, than was it the purpose of the National Board of Health to limit its labors to a consideration of the number of victims claimed by yellow fever. Not that contagious pleuro-pneumonia of cattle does not offer a matter worthy the serious attention of such a bureau, for pecuniarily it does, but because it is one of those diseases fraught with but little danger to human health as compared with many others which afflict the lower animals. Perhaps the *Record* does not know that Gerlach, the veterinarian, first instituted the investigations which determined the transmissibility of tuberculosis through the use of milk drawn from infected animals! Can he deny that this disease may also be communicated to man through the medium of the expired air? Does the medical profession know how dangerously prevalent this disease already is, and with what rapid progress it is spreading? Can they determine its presence in the domestic animals except upon post mortem examination? Are the dangers from this disease of so little importance that it can be placed upon a par with sycosis? Is it not time this boasted medical profession had turned their attention to the *prevention* of disease rather than spend their lives as simple *curers*? And if they should determine to make an advance in this regard, they will find no richer field in which to labor than that which includes the animal diseases and their consequent source of disease to man. Tuberculosis is but *one* of these, though probably the most dangerous of all, for the reason that the medical profession as a body does not know of its infectious qualities, and no precautions are taken to prevent the everyday use of milk from animals so affected, or the use of their carcasses for food.

These presumed guardians of human health are equally ignorant of the common prevalence, in some parts of the country, of

cattle anthrax, and most of them unaware of the fact that the veterinarian Fezer, of Munich, has found the *Bacillus Anthracis* in the milk of animals suffering from this malady, and proven its power of communicating the disease to other animals when gaining direct access to the blood, as it may through abrasions or wounds, when taken as food. Has humanity any protection against this terribly fatal disorder except that furnished by the veterinarian's skill? The same question may be asked, and the same negative answer in every instance must be given, regarding glanders and farcy of the equine species; hydrophobia and the parasitic diseases of the canines; measles, trichinosis and "hog cholera" of swine; and "Texas fever," rinderpest, eczema, epizootic and other diseases of ruminants.

New York City, which has probably adopted more measures for the efficient protection of her citizens than any other community in this country, is yet open to infection from many sources that are entirely overlooked, or that are at least as yet unguarded against. While she with great pains and entire justice arrests and fines dealers in watered milk, she takes no precautions against the introduction and consumption of milk that may contain animal viruses that are most disastrous to human health.

In fact, all the diseases to which the lower animals are subject affect more or less directly or indirectly, the health, life, pecuniary interests or happiness of man, and it remains alone for those who are veterinarians to sooner or later afford that protection which a scientific knowledge of these matters shall indicate.

Let veterinary science receive from the hands of all intelligent men, and especially from the medical profession, that kindly recognition and support which justice demands, and let the derision which has characterized too many of the references made to us in medical journals be replaced by sentiments that accord strictly with facts, and that are unbiased with envy, conceit or bigotry.

Yours truly,

A VETERINARIAN.

• ITALIAN VETERINARY CONGRESS.

As announced by circulars and notices, the Italian Veterinary Congress assembled in the city of Bologna on the 7th of September and continued in session until the 10th—four days.

It proved a perfect success. A large number of the members of the profession gathered in the large amphitheatre reserved for that purpose, and nearly three hundred veterinarians were collected together from the different parts of Italy, besides numerous specially appointed officers, representing different branches of the Government.

Under the presidency of Prof. Lanzillotti Buonsanti, the affair passed off in the most satisfactory manner, and concluded with a magnificent supper, at which nearly one hundred members sat together and congratulated each other upon the success of their work.

The officers of the Congress were: President—Prof. Lanzillotti Buonsanti, of the Milan Veterinary School; Vice President—Prof. Generali, Director of the Modena Veterinary School; Secretary—Prof. Tampellini, of the Modena School; Vice Secretary—Dr. Azzali.

During the two sessions of each of the four days of the Congress, and according to previous arrangements, numerous questions of importance relating to Veterinary Education, Veterinary Practice, Sanitary Medicine and Jurisprudence, were discussed. Amongst them we noticed the following, which, like many others, were passed unanimously: Upon the admission of students in the veterinary schools; Upon the necessity of preventing, in the interest of the public, the practice of veterinary medicine by unqualified persons; Upon the best manner of rendering the education in veterinary schools more practical; Upon the necessity of special instruction for the inspectors of meat in slaughter houses, and a relative microscopic examination; Upon the organization of a veterinary inspection of slaughter houses in large cities, and upon the best mode of organizing the inspection of markets

and meat in all towns; Upon the general administration of the veterinary schools; Upon the frame of proposed laws regulating the trade in animals and laws of warranty, common throughout Italy; Upon the formation of a protective and mutual Society; Upon the organization of a sanitary veterinary service over the entire country.

The entire transactions of the meeting, with papers and discussions, are to be published in book form, the Ministers of Instruction and of the Interior having granted a special sum of 300 francs towards defraying the expenses of printing.

INAUGURATION OF THE STATUE TO BOURGELAT.

On the 30th of October the inauguration of the monument to Claude Bourgelat was celebrated in the school of Alfort.

A large number of people assisted at the ceremony, amongst which, besides many veterinarians, for whom it was a grand holiday of professional pride, were seen many physicians, scientific men, political and literary notabilities.

The Institute, the Academy of Medicine, the Central Society of Agriculture, several scientific societies of Paris and veterinary associations of France had sent delegates for the occasion.

Mr. Chauveau, director of the Lyons school, represented that great institution.

Toulouse school had sent a congratulatory address signed by the members of the faculty.

Foreign veterinary colleges were also represented. Those of Berne, in Switzerland; of Bruxelles, in Belgium; of Munich, in Germany, each had one of their professors as delegate.

Three speeches were delivered: by Mr. Bouley, who represented the Minister of Agriculture, by Mr. Baron, professor of zootechny at Alfort, and by Mr. Thierry in the name of the veterinary profession. The ceremony closed with the delivery of a poem from the pen of a young veterinarian, Mr. Ernest Pion.

OBITUARY.

C. H. STOCKER, D.V.S. of Salem, Mass, died in the night of Thursday, 20th of November, from the effects of prussic acid which he took a few hours before. His diploma dated from 1876.

SPECIMENS SENT TO THE MUSEUM OF THE AMERICAN VETERINARY COLLEGE.

- 164, 165. Skulls.....A. Liautard, M.D., V.S.
166. Pleuro-Pneumonia.....L. I. Bell, D.V.S.
167. Tuberculous and Pleuro-Pneumonic
Lungs of a Cow.....L. I. Bell, D.V.S.
168. Necrosis of Os Pedis, Navicular Bone
and Os Coronæ from Punctured
Wound of Foot.....C. Stocker, D.V.S.
169. Calcified Vertebrae of Alligator.....R. McLean, D.V.S.
170. Portion of Left Branch of Inferior
Maxillary of an Hippopotamus.....R. McLean, D.V.S.
171. Foot of a Mule, amputated with shoe
attached (case recorded in Octo.
No. of Am. Vet. Review).....W. E. B. Miller, D.V.S.
172. Fracture of Ossa Innominata at the
Cotyloid Cavity, with Fracture of
the Head of the Femur displaced
on the Posterior Face of the Fe-
mur.....E. F. Thayer, V.S.
173. Strongyli of Bronchia of Calf.....F. S. Billings, V.M.

EXCHANGES, ETC., RECEIVED.

Turf, Field and Farm, Hospital Gazette, Medical Record, Prairie Farmer, Live Stock Journal, Ohio and Practical Farmer, Scientific American, Bulletin National Board of Health, Medical and Surgical Reporter, Archiv. fur Wissenschaftliche und Practische Theiirhielkunde, Monatschrift des Vereines der Thierazte in Oesterreich, Revue Internationale de Medecine Dosimetrique Veterinaire, Clinica Veterinaria (Milan), Recueil de Medecine Veterinaire (Paris), Annales de Medecine Veterinaire (Bruxelles), Archives Veterinaires (Alfort), Veterinary Journal, Veterinarian (London), Journal de Zootechnie (Lyons), Gazette Medicale (Paris).

BOOKS.—Strangway's Veterinary Anatomy, revised by L. Vaughan; Bulletin de la Société Centrale de Medecine Veterinaire; Farmer's Veterinary Adviser, by Prof. J. Law, 2d Edition; The Lung Plague of Cattle, by Prof. J. Law.

CORRESPONDENCE.—A Veterinarian, M. R. Trumbower, W. J. Coates, F. S. Billings.

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